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HIGH-VOLTAGE VARIABLE CAPACITOR,(U)
OCT 77 I I KALYATSKIY, V I KURETS
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FOREIGN TECHNOLOGY DIVISION

HIGH-VOLTAGE VARIABLE CAPACITOR

I. I. Kalyatskiy, V. I. Kurets,
et al.

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EDITED TRANSLATION

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HIGH-VOLTAGE VARIABLE CAPACITOR

By: I. I. Kalyatskiy, V. I. Kurets, et al.

English pages: 3

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U. S. BOARD ON GEOGRAPHIC NAMES TRANSLITERATION SYSTEM

Block	Italic	Transliteration	Block	Italic	Transliteration
А а	*А а*	A, a	Р р	*Р р*	R, r
Б б	*Б б*	B, b	С с	*С с*	S, s
В в	*В в*	V, v	Т т	*Т т*	T, t
Г г	*Г г*	G, g	У у	*У у*	U, u
Д д	*Д д*	D, d	Ф ф	*Ф ф*	F, f
Е е	*Е е*	Ye, ye; E, e*	Х х	*Х х*	Kh, kh
Ж ж	*Ж ж*	Zh, zh	Ц ц	*Ц ц*	Ts, ts
З з	*З з*	Z, z	Ч ч	*Ч ч*	Ch, ch
И и	*И и*	I, i	Ш ш	*Ш ш*	Sh, sh
Й й	*Й й*	Y, y	Щ щ	*Щ щ*	Shch, shch
К к	*К к*	K, k	Ъ ъ	*Ъ ъ*	"
Л л	*Л л*	L, l	Ы ы	*Ы ы*	Y, y
М м	*М м*	M, m	Ь ь	*Ь ь*	'
Н н	*Н н*	N, n	Э э	*Э э*	E, e
О о	*О о*	O, o	Ю ю	*Ю ю*	Yu, yu
П п	*П п*	P, p	Я я	*Я я*	Ya, ya

*ye initially, after vowels, and after ъ, ь; e elsewhere.
When written as ё in Russian, transliterate as yë or ë.

RUSSIAN AND ENGLISH TRIGONOMETRIC FUNCTIONS

Russian	English	Russian	English	Russian	English
sin	sin	sh	sinh	arc sh	$\sinh^{-1}$
cos	cos	ch	cosh	arc ch	$\cosh^{-1}$
tg	tan	th	tanh	arc th	$\tanh^{-1}$
ctg	cot	cth	coth	arc cth	$\coth^{-1}$
sec	sec	sch	sech	arc sch	sech^{-1}
cosec	csc	csch	csch	arc csch	csch^{-1}

Russian	English
rot	curl
lg	log

1894

HIGH-VOLTAGE VARIABLE CAPACITOR

I. I. Kalyatskiy, V. I. Kurets, V. N. Pcnomarev, V. N. Safronov and V. A. Tsukerman

Tomsk Order of the Red Banner of Labor Polytechnic Institute imeni S. M. Kirov

This invention is in the field of radio engineering; in particular, the generation of high-voltage current and voltage pulses.

We have a high-voltage variable capacitor which consists of two cylindrical shells with a current-carrying rod and controlled capacitances.

The purpose of this invention is to obtain continuous control of the capacitance of the capacitor at a constant inherent inductance.

The figure shows the proposed capacitor.

The high-voltage capacitor consists of cylindrical shell 1 with ground and covering 2, connected to current-carrying rod 3 with polyethylene insulation. The high-voltage pulse is sent to the rod.

The capacitor is made airtight by insulated bottom 4 and insulated cap 5. Coaxiality of the cylinders is provided by screw mounting of the current-carring rod 3 on cap 5. Transformer oil is placed on the upper part of the capacitor as the dielectric and glycerin - on the lower part.

The volumes filled with transformer oil and glycerin can be continuously controlled by tanks 6 and 7 through pipes 8 and 9. The required capacitance of the capacitor is calculated from the condition of the equivalence of the volumes filled with glycerin and transformer oil.

Subject of Invention

This invention is a high-voltage variable capacitor which consists of two cylindrical shells with a current-carrying rod and control volumes. It differs in that in order to obtain continuous control of the capacitance of the capacitor at constant inherent inductance, two fluids in the unmixed state with different dielectric and physical properties whose volumes are controlled in the capacitor are used as the dielectric.

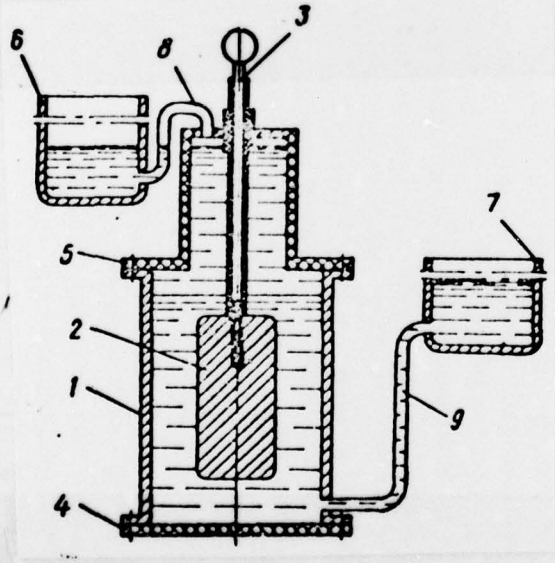

Figure.

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